

FTLX1370W4BTL-AO

Finisar® FTLX1370W4BTL Compatible TAA Compliant 10GBase-LRL CPRI SFP+ Transceiver (SMF, 1310nm, 1.4km, LC, DOM, -40 to 85C)

Features

- SFF-8432 and SFF-8472 Compliance
- Duplex LC Connector
- Industrial Temperature -40 to 85 Celsius
- Single-mode Fiber
- Hot Pluggable
- Excellent ESD Protection
- Metal with Lower EMI
- RoHS Compliant and Lead Free



Applications

- 8x/10x Fibre Channel
- 10GBase-LR Ethernet
- Access, Datacenter and Enterprise
- Mobile Fronthaul CPRI/OBSAI

Product Description

This Finisar® FTLX1370W4BTL compatible SFP+ transceiver provides 10GBase-LRL throughput up to 2km over single-mode fiber (SMF) using a wavelength of 1310nm via an LC connector. It is guaranteed to be 100% compatible with the equivalent Finisar® transceiver. This easy to install, hot swappable transceiver has been programmed, uniquely serialized and data-traffic and application tested to ensure that it will initialize and perform identically. Digital optical monitoring (DOM) support is also present to allow access to real-time operating parameters. This transceiver is Trade Agreements Act (TAA) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

AddOn's transceivers are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products."



Regulatory Compliance

- ESD to the Electrical PINs: compatible with MIL-STD-883E Method 3015.4
- ESD to the LC Receptacle: compatible with IEC 61000-4-3
- EMI/EMC compatible with FCC Part 15 Subpart B Rules, EN55022:2010
- Laser Eye Safety compatible with FDA 21CFR, EN60950-1& EN (IEC) 60825-1,2
- RoHS compliant with EU RoHS 2.0 directive 2015/863/EU

Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit
Maximum Supply Voltage	Vcc	-0.5		4.0	V
Storage Temperature	TS	-40		85	°C
Operating Case Temperature	Ti	-40		85	°C
Receiver Power	R _{MAX}			0.5	dBm
Data Rate			10		Gbps
Max Link Length on 9/125µm SMF	Lmax		1.4		km

Electrical Characteristics (TOP=25°C, Vcc=3.3Volts)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Power Supply Voltage	Vcc	3.1	3.3	3.55	V	
Power Supply Current	Icc			300	mA	
Transmitter						
Input Differential Impedance	Zin	90	100	110	Ω	
Data Input Swing Differential	Vin	250		1200	mV	
Tx-Dis Disable	Vd	2.0		Vcc	V	
Tx-Dis Enable	Ven	0		0.8	V	
Receiver						
Data Output Swing Differential	Vout	250		800	mV	
Rx-Los Fault	Vlf	2.0		VccHOST	V	
Rx-Los Normal	Vln	0		0+0.8	V	
Output rise and fall time	Tr, Tf	30			ps	

Optical Characteristics

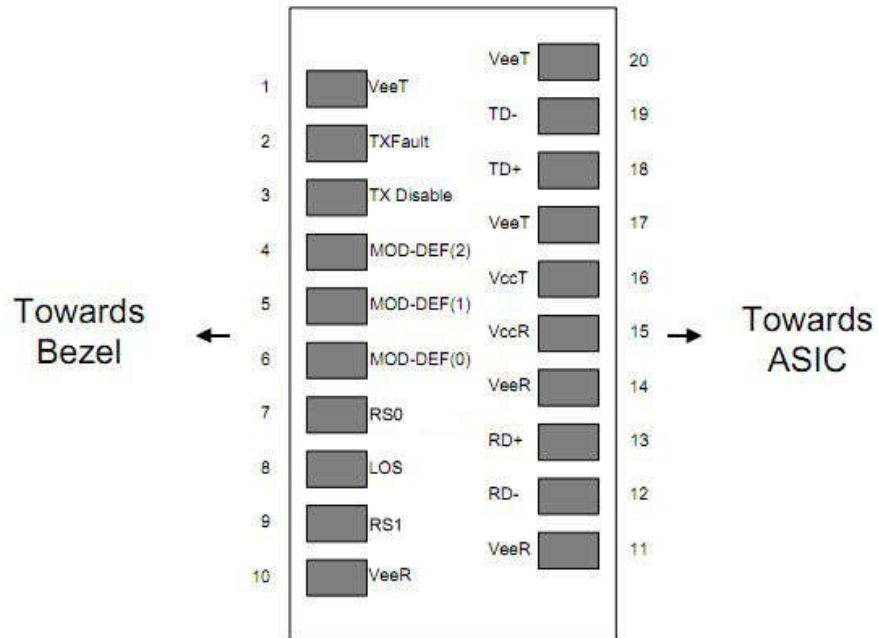
Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Transmitter						
Centre Wavelength	λ_c	1260	1310	1360	nm	
Spectral Width (RMS)	σ			3	nm	
Average Output Power	P _{out}	-6		0	dBm	
Extinction Ratio	ER	3.5			dB	
Average Launch Power of Off Transmitter	P _{off}			-30	dBm	
Receiver						
Centre Wavelength	λ_c	1200	1310	1600	nm	
Receiver Sensitivity	P _{IN}			-13	dBm	
Receiver Overload	P _{max}	0.5			dBm	
LOS De-Assert	LOS _D			-25	dBm	
LOS Assert	LOS _A	-26			dBm	
LOS Hysteresis		0.5		4.5	dB	

Pin Descriptions

Pin	Symbol	Name/Descriptions	Ref.
1	VEET	Transmitter Ground (Common with Receiver Ground)	1
2	TFAULT	Transmitter Fault. Not supported.	
3	TDIS	Transmitter Disable. Laser output disabled on high or open.	2
4	MOD_DEF(2)	Module Definition 2. Data line for Serial ID.	3
5	MOD_DEF(1)	Module Definition 1. Clock line for Serial ID.	3
6	MOD_DEF(0)	Module Definition 0. Grounded within the module.	3
7	RS0	Rate Select0, optionally controls SFP+ module receiver. When high input signaling rate>4.25 GBd and when low input signaling rate<4.25GBd	
8	LOS	Loss of Signal indication. Logic 0 indicates normal operation.	4
9	RS1	Rate Select1, optionally controls SFP+ module receiver. When high input signaling rate>4.25 GBd and when low input signaling rate<4.25GBd	
10	VEER	Receiver Ground (Common with Transmitter Ground)	1
11	VEER	Receiver Ground (Common with Transmitter Ground)	1
12	RD-	Receiver Inverted DATA out. AC Coupled.	
13	RD+	Receiver Non-inverted DATA out. AC Coupled.	
14	VEER	Receiver Ground (Common with Transmitter Ground)	1
15	VCCR	Receiver Power Supply	
16	VCCT	Transmitter Power Supply	
17	VEET	Transmitter Ground (Common with Receiver Ground)	1
18	TD+	Transmitter Non-Inverted DATA in. AC Coupled.	
19	TD-	Transmitter Inverted DATA in. AC Coupled.	
20	VEET	Transmitter Ground (Common with Receiver Ground)	1

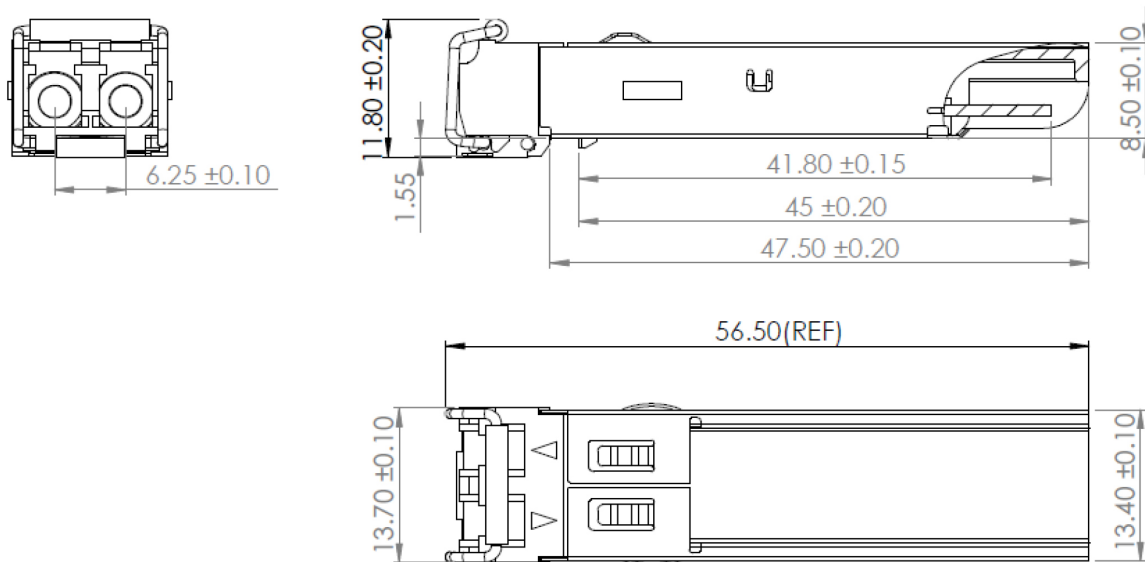
Notes:

1. Circuit ground is internally isolated from chassis ground.
2. Laser output disabled on TDIS >2.0V or open, enabled on TDIS <0.8V.
3. Should be pulled up with 4.7k - 10kohms on host board to a voltage between 2.0V and 3.6V.
MOD_DEF(0) pulls line low to indicate module is plugged in.
4. LOS is open collector output. Should be pulled up with 4.7k -10kohms on host board to a voltage between 2.0V and 3.6V. Logic 0 indicates normal operation; logic 1 indicates loss of signal.



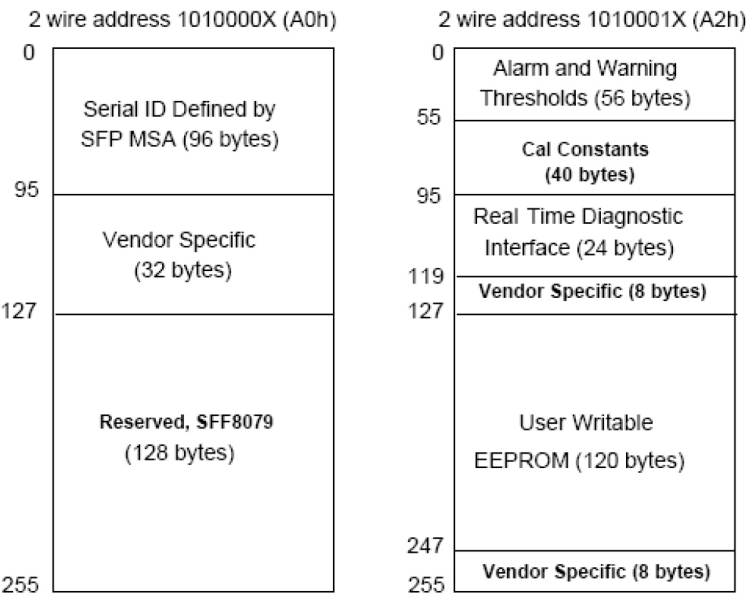
Mechanical Specifications

Small Form Factor Pluggable (SFP) transceivers are compatible with the dimensions defined by the SFP Multi-Sourcing Agreement (MSA).



EEPROM Information

EEPROM memory map specific data field description is as below:



Digital Diagnostic Monitor Threshold

Parameter	Low Alarm	Low Warn	High Warn	High Alarm
Temperature	-45°C	-40°C	85°C	100°C
Voltage	3V	3.1V	3.6V	3.7V
Tx Bias	15mA	20mA	75mA	80mA
Tx Power	-8dBm	-7dBm	0.5dBm	1.5dBm
Rx Power	-18dBm	-16dBm	0.5dBm	1.5dBm

About AddOn Networks

In 1999, AddOn Networks entered the market with a single product. Our founders fulfilled a severe shortage for compatible, cost-effective optical transceivers that compete at the same performance levels as leading OEM manufacturers. Adhering to the idea of redefining service and product quality not previously had in the fiber optic networking industry, AddOn invested resources in solution design, production, fulfillment, and global support.

Combining one of the most extensive and stringent testing processes in the industry, an exceptional free tech support center, and a consistent roll-out of innovative technologies, AddOn has continually set industry standards of quality and reliability throughout its history.

Reliability is the cornerstone of any optical fiber network and is engrained in AddOn's DNA. It has played a key role in nurturing the long-term relationships developed over the years with customers. AddOn remains committed to exceeding industry standards with certifications from ranging from NEBS Level 3 to ISO 9001:2005 with every new development while maintaining the signature reliability of its products.

U.S. Headquarters

Email: sales@addonnetworks.com

Telephone: +1 877.292.1701

Fax: 949.266.9273

Europe Headquarters

Email: salesupportemea@addonnetworks.com

Telephone: +44 1285 842070